

## Andree Greenberg - Cargill - Next Step

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**From:** Brian Thompson  
**To:** Bowyer, Dale; Brian Thompson; Kifle, Habte; Lee, Shin-Roei; RB2-CR1411; Tang, Lila; Whyte, Dyan; Wines, Brian  
**Date:** 6/4/2012  
**Time:** 11:00 AM - 11:45 AM  
**Subject:** Cargill - Next Step  
**Place:** RB2-CR1411  
**CC:** Greenberg, Andree  
**Attachments:** Re Cargils Response to Our March 29, 2012 Letter.txt

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This meeting is scheduled to discuss the following and to provide Dyan with more information about what Cargill is and is not allowed to do under their permit.

- (1) Cargill's response to our letter (past email chain about it attached);
- (2) plans for our next steps and who will be doing what (e.g., monitoring of apparent fill activities, requesting more information about Cargill's operations, conducting inspections).

If there is anyone who should attend this meeting and is not included, please forward to them.

- Brian

From: Lila Tang  
To: Brian Thompson; Brian Wines; Dyan Whyte; Habte Kifle; Keith Lichten  
Cc: Andree Greenberg; Dale Bowyer; Shin-Roei Lee  
No String Available 5/4/2012 8:57 AM  
Subject: Re: Cargil's Response to Our March 29, 2012 Letter

I'm satisfied by Cargill's response, but agree to Habte's recommendation for a plant tour if he wishes to verify Cargill's explanation, to the extent possible. The site visit would also allow clarification of some of the points others have made. However, while I appreciate everyone's thoughts, I would like to limit our focus on the (now you see it, now you don't) fill at the corners of Ponds 4 and 13 as we had decided and agreed upon during our meeting earlier this year. I prefer not to keep revisiting other issues unless there is new evidence unknown to us at the time as to maintain forward progress. As I see it, the questions to clarify are as follows:

1. Based on our (my) past tours, Cargill harvest crystallized salt mechanically, and takes great pains to not scrap dirt during harvesting. Why do the stockpiles shown in Pond 4 appear so much dirtier? I'm not expert in salt harvesting, but one plausible explanation would be that it's a brute force process and dirt will get dug up with the salt and it don't take much dirt to make salt look dirty...just go to a specialty salt isle in any gourmet food store.

2. As we understand it, the bittern product is primarily a liquid with high suspended (and dissolved) solids. How does the process of harvesting bittern salts result in stockpiling it in a corner to "free the entrapped brine, and recover this brine for sale"? How does one even stockpile a liquid? To me, one plausible explanation of what is happening would be that solids in the pond are moved to a corner to deepen the pond to facilitate insertion of pump intakes to pump the freed liquid bittern without entraining bottom sediments. Cargill considers those solids product because they are still sodium and magnesium salts, just not in the dissolved state.

From: Keith Lichten  
To: Brian Thompson; Brian Wines; Dyan Whyte; Habte Kifle; Lila Tang  
CC: Andree Greenberg; Dale Bowyer; Shin-Roei Lee  
Date: 5/3/2012 1:01 PM  
Subject: Re: Cargil's Response to Our March 29, 2012 Letter

Habte,

Thanks for sending this synopsis.

Perhaps it was addressed in the letter, but the summary of Cargill's response does not explain why, as we have observed from the satellite/aerial photos, fill has remained for years in its ponds, and in an accumulating manner--in one case, as we noted, completely filling a Newark pond on which maintenance vehicles are now stored. The idea that temporary, seasonal fill could occur as part of the salt harvest makes sense, but it seems unlikely to me that we would accept the idea that salt harvesting necessarily leads to the gradual permanent fill of salt ponds. In fact, that's the question we raised in our letter.

Separately, the idea that Cargill can ditch its toxic salt-making byproduct in a manner that effectively results in fill of its ponds should also be a non-starter for us. Cargill has gradually accumulated bittern (and tried to transfer the bittern ponds, and responsibility for addressing this issue to the US government during the salt pond sale). Bittern is a significant issue, but Cargill's decision to not yet address it shouldn't lead us to accept collateral fill, or something that functions as/looks like fill. The corporation has no shortage of funds to address the issue, even if there's no significant monetary return on that for them.

-Keith

>>> Brian Wines 5/3/2012 12:24 PM >>>

Thanks Habte

I wish I had asked to see the bittern ponds when I've been out at their facilities in Newark.  
I don't remember if the bittern looks like mud.

But there is a lot of suspended sediments in the ponds. Many of them are big enough to have wind-generated waves that may stir up bottom sediments or erode levy walls. When the salt is scraped off of the crystallizer beds, it looks fairly pure and the crews who do the work are good at avoiding scooping up the dirt ponds bottoms with the salt.

I think the bittern is the fluid that is pumped out of the crystallizer beds, so it may be a lot dirtier.

Is there any way to time an inspection at the time when bittern is being separated from the commercial product?

>>> Habte Kifle 5/3/2012 11:59 AM >>>

On April 30, 2012, Cargill submitted its response to the questions we asked in our March 29 letter. I reviewed it, and synopsis of the response is below:

Cargill's response is generally the same as it has previously responded to U.S. Army Corps of Engineers in April 2010 and BCDC, except now it is more detail of what constitutes the material that looks earth moving from satellite image.

Cargill welcomes us for site inspection to show us the suspected areas, especially Crystallizer Pond 4 in Redwood City and Bittern Salt Pond 13 in Newark.

Cargill argues that the material that looks dirt or earth moving from satellite at Ponds 4 and 13 is bittern from its salt and bittern production and harvesting operations. The source of material in Crystallizer 4 within the Redwood City Plant Site is from bittern salt harvesting within the Plant Site. Harvested salt are stockpiled onsite to drain entrapped brines before loading. Whereas, the source of material in Bittern Pond 13 within the Newark Plant Site is from bittern salt harvesting within the Newark Plant Site. The bittern salts are stockpiled and pushed to the edge of bittern Pond 13, to free the entrapped brine and recover the brine for sale.

Thus, the elevation change is due to the stockpiling of salt based on Cargill's response. Cargill answered to every question we asked in our March 29 letter. They have included as an attachment all the correspondences from Mr. Baye's February 2, 2010, that initiated the complaint to the present.

Conclusion: Now, it is up to us either to inspect the site to convince ourselves or to accept the explanation provide to us. In my opinion, the response is consistent with the previous responses Cargill gave to the Corps and BCDC, and we may not win it alone. For my own curiosity, understanding of the salt harvesting process, and to confidently address any similar future complaints, I would like to accept the invitation for site inspection.

Habte

Habte Kifle  
Water Resources Control Engineer  
San Francisco Bay Regional Water Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
Phone: (510) 622-2371  
Fax: (510) 622-2460  
E-mail: hkifle@waterboards.ca.gov

## Andree Greenberg - Re: Cargil's Response to Our March 29, 2012 Letter

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**From:** Brian Wines  
**To:** Thompson, Brian; Whyte, Dyan; Kifle, Habte; Lichten, Keith; Tang, Lila  
**Date:** 5/4/2012 9:27 AM  
**Subject:** Re: Cargil's Response to Our March 29, 2012 Letter  
**CC:** Greenberg, Andree; Bowyer, Dale; Lee, Shin-Roei

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A couple more thoughts on this.

1. Cargil's newly harvested salt looks pretty white, based on my site visit. The harvesting process wouldn't explain the mounds of dirt in Ponds 4 and 13.
2. The deposits in Ponds 4 and 13 look sort of like alluvial fans. That pattern could be consistent with either:
  - a) large amounts of sludge being discharged from a point at the edge of the pond, or
  - b) a single deposit of a solid, that is then spread out into the pond bottom with a bulldozer.
 From what I saw in the photos, the patterns would not be consistent with excavating a deeper point in the ponds.
3. My gut feeling is that the Corps is satisfied with Cargil's responses, because they have been instructed by D.C. to be satisfied.

If we do decide that we don't have the resources to justify further investigation (and I'm not sure we would be able to achieve anything concrete/enforceable through further investigation), can we avoid using words like "satisfied" in our correspondence with Cargil. Cargil will use any correspondence from us that appears to support their position as a club against their opponents at Redwood City. Look at the way they are using the Corps's letter and the (frankly, very troubling) letter from BCDC.

I think it is a better strategic move to just say that, "we will not be pursuing this matter further, at this time, but we will continue to monitor operations at the plants."

>>> Lila Tang 05/04/12 8:57 AM >>>

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**From:** Dale Bowyer  
**To:** Brian Thompson; Brian Wines; Dyan Whyte; Habte Kifle; Lila Tang  
**Date:** 5/3/2012 3:17 PM  
**Subject:** Re: Cargil's Response to Our March 29, 2012 Letter  
**CC:** Andree Greenberg; Keith Lichten; Shin-Roei Lee

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Greetings,

The bittern is a deep reddish brown salt solution. It does not look like mud or muddy slurry. It can be pretty opaque, but is more like Thai iced tea or even more orange.

Dale Bowyer 510-622-2323

[dbowyer@waterboards.ca.gov](mailto:dbowyer@waterboards.ca.gov)

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